

State Injury Profile for Massachusetts

About the State Injury Profiles...

Following this introduction you will find the injury profile for your state and the nation. The maps and tables contain information on injury deaths and death rates; however, it is important to remember that hundreds of thousands of Americans are nonfatally injured each year, many of whom suffer permanent disabilities. Your state injury profile includes:

- The 10 leading causes of death by age group for your state and the nation. These charts contain the total number of deaths for the three-year period 1995 through 1997. The summary table at the bottom of each page shows the total number of injuries across all ages for the same three-year period and the average number of deaths per year.
- The tables on the next page show the number of deaths for your state and the nation for the leading causes of injury death (separated by the type of injury—unintentional, suicide, and homicide) for the same three-year period.
- The next pages contain U.S. maps indicating the death rate per 100,000 persons for all states over a three-year period (1995-1997) for the leading causes of injury death. Beneath each map is a graph showing the death rate over a 10-year period (1988-1997). These maps and graphs will allow you to compare death rates for your state to other states and understand the 10-year trend in your state compared to the U.S. trend.
- The last two maps in the Profile give death-rate data and 10-year trends for two of the most frequent and disabling types of injury-related deaths: traumatic brain injury-related deaths, which can be caused by falls, firearms, motor-vehicle crashes, or other causes; and firearm-related deaths, unintentional or the result of homicide or suicide.

This State Injury Profile 2000 is presented as an appendix to the Centers for Disease Control and Prevention (CDC) Injury Fact Book, *Working to Prevent and Control Injury in the United States*. The Fact Book contains information regarding the cost of injury and the value of prevention, the work of CDC's National Center for Injury Prevention and Control, and the Safe USA Partnership Council. The Fact Book also contains fact sheets for many of the leading causes of injury death. Additional information can also be obtained from—

- The CDC National Center for Injury Prevention and Control web site: <http://www.cdc.gov/ncipc/>
- The CDC National Center for Injury Prevention and Control, Office of Planning, Evaluation, and Legislation: 770-488-4936
- Safe USA web site: <http://www.cdc.gov/safe/>
- Safe USA toll-free number: 1-888-252-7751

United States

10 Leading Causes of Deaths by Age Group: 1995-1997

Rank	Age Groups										Total
	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	
1	Congenital Anomalies 19,113	Unintentional Injuries 6,432	Unintentional Injuries 4,734	Unintentional Injuries 5,614	Unintentional Injuries 41,018	Unintentional Injuries 38,858	Malignant Neoplasms 51,258	Malignant Neoplasms 134,242	Malignant Neoplasms 261,040	Heart Disease 1,834,538	Heart Disease 2,197,898
2	Short Gestation 11,760	Congenital Anomalies 1,922	Malignant Neoplasms 1,593	Malignant Neoplasms 1,491	Homicide 19,978	HIV 23,935	Unintentional Injuries 43,023	Heart Disease 104,809	Heart Disease 201,533	Malignant Neoplasms 1,147,043	Malignant Neoplasms 1,617,565
3	SIDS 9,438	Malignant Neoplasms 1,350	Congenital Anomalies 706	Homicide 1,023	Suicide 13,328	Suicide 17,825	Heart Disease 40,047	Unintentional Injuries 29,523	Bronchitis Emphysema Asthma 30,143	Cerebro-vascular 419,616	Cerebro-vascular 477,724
4	Respiratory Distress Synd. 4,117	Homicide 1,247	Homicide 510	Suicide 931	Malignant Neoplasms 4,919	Homicide 16,665	HIV 39,570	HIV 17,951	Cerebro-vascular 29,087	Bronchitis Emphysema Asthma 274,359	Bronchitis Emphysema Asthma 317,955
5	Maternal Complications 3,802	Heart Disease 680	Heart Disease 387	Congenital Anomalies 647	Heart Disease 3,106	Malignant Neoplasms 14,327	Suicide 19,938	Cerebro-vascular 16,960	Diabetes 24,987	Pneumonia & Influenza 226,837	Unintentional Injuries 283,912
6	Placenta Cord Membranes 2,871	Pneumonia & Influenza 504	HIV 288	Heart Disease 554	HIV 1,318	Heart Disease 10,097	Homicide 11,689	Liver Disease 16,300	Unintentional Injuries 20,719	Diabetes 138,117	Pneumonia & Influenza 253,099
7	Unintentional Injuries 2,356	HIV 411	Pneumonia & Influenza 221	Bronchitis Emphysema Asthma 294	Congenital Anomalies 1,254	Cerebro-vascular 2,118	Liver Disease 10,853	Suicide 14,317	Liver Disease 15,921	Unintentional Injuries 91,315	Diabetes 183,657
8	Perinatal Infections 2,321	Septicemia 236	Bronchitis Emphysema Asthma 143	Pneumonia & Influenza 184	Bronchitis Emphysema Asthma 684	Diabetes 1,881	Cerebro-vascular 8,281	Diabetes 12,589	Pneumonia & Influenza 10,830	Alzheimer's Disease 63,461	Suicide 92,722
9	Pneumonia & Influenza 1,409	Perinatal Period 222	Benign Neoplasms 132	HIV 180	Pneumonia & Influenza 630	Pneumonia & Influenza 1,724	Diabetes 5,581	Bronchitis Emphysema Asthma 8,395	Suicide 8,675	Nephritis 62,838	HIV 90,761
10	Intrauterine Hypoxia 1,355	Benign Neoplasms 189	Anemias 98	Cerebro-vascular 135	Cerebro-vascular 527	Liver Disease 1,690	Pneumonia & Influenza 4,335	Pneumonia & Influenza 6,405	Septicemia 5,350	Septicemia 52,315	Liver Disease 75,444

United States Total Number of Injury Deaths

<u>Cause</u>	<u>Deaths</u>	<u>Percent</u>
Unintentional Injury	283,912	64.5%
Intentional	156,434	35.5%
Total (1995-1997)	440,346	100.0%

Average Number of Injury Deaths per Year
In the United States = **146,782**

Massachusetts

10 Leading Causes of Deaths by Age Group: 1995-1997

Rank	Age Groups										Total
	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	
1	Congenital Anomalies 259	Unintentional Injuries 51	Unintentional Injuries 38	Unintentional Injuries 59	Unintentional Injuries 447	HIV 463	Malignant Neoplasms 1,062	Malignant Neoplasms 3,100	Malignant Neoplasms 6,019	Heart Disease 43,418	Heart Disease 50,098
2	Short Gestation 198	Congenital Anomalies 29	Malignant Neoplasms 33	Malignant Neoplasms 32	Suicide 193	Unintentional Injuries 387	HIV 883	Heart Disease 1,974	Heart Disease 3,706	Malignant Neoplasms 31,002	Malignant Neoplasms 41,722
3	SIDS 102	Malignant Neoplasms 27	Congenital Anomalies 12	Congenital Anomalies 14	Homicide 193	Suicide 339	Heart Disease 686	Liver Disease 338	Bronchitis Emphysema Asthma 509	Cerebro-vascular 9,365	Cerebro-vascular 10,227
4	Maternal Complications 77	Heart Disease 15	Heart Disease 9	Homicide 11	Malignant Neoplasms 111	Malignant Neoplasms 332	Unintentional Injuries 388	HIV 332	Diabetes 467	Pneumonia & Influenza 7,639	Pneumonia & Influenza 8,181
5	Respiratory Distress Synd. 68	Homicide 11	HIV 5	Heart Disease 9	Heart Disease 53	Heart Disease 202	Suicide 346	Unintentional Injuries 289	Cerebro-vascular 411	Bronchitis Emphysema Asthma 6,460	Bronchitis Emphysema Asthma 7,233
6	Placenta Cord Membranes 55	HIV 8	Pneumonia & Influenza 4	Suicide 9	Congenital Anomalies 26	Homicide 139	Liver Disease 218	Cerebro-vascular 253	Liver Disease 286	Diabetes 3,225	Diabetes 4,039
7	Perinatal Infections 27	Pneumonia & Influenza 8	Homicide 4	HIV 5	HIV 14	Pneumonia & Influenza 45	Cerebro-vascular 131	Suicide 236	Pneumonia & Influenza 246	Nephritis 2,363	Unintentional Injuries 3,784
8	Intrauterine Hypoxia 18	Bronchitis Emphysema Asthma 7	Benign Neoplasms 3	Benign Neoplasms 3	Bronchitis Emphysema Asthma 13	Liver Disease 44	Diabetes 95	Diabetes 214	Unintentional Injuries 223	Alzheimer's Disease 1,965	Nephritis 2,656
9	Birth Trauma 13	Benign Neoplasms 4	6 Tied	3 Tied	Cerebro-vascular 12	Congenital Anomalies 38	Pneumonia & Influenza 91	Bronchitis Emphysema Asthma 159	Septicemia 167	Unintentional Injuries 1,889	Septicemia 2,149
10	Pneumonia & Influenza 13	Meningo-coccal 4	6 Tied	3 Tied	Pneumonia & Influenza 10	Diabetes 35	Homicide 87	Pneumonia & Influenza 125	Nephritis 145	Septicemia 1,804	Alzheimer's Disease 1,997

Massachusetts Total Number of Injury Deaths

<u>Cause</u>	<u>Deaths</u>	<u>Percent</u>
Unintentional Injury	3,784	65.1%
Intentional Injury	2,030	34.9%
Total (1995-1997)	5,814	100.0%

Average Number of Injury Deaths per Year
In Massachusetts = **1,938**

1995-1997 Leading Causes of Death

Unintentional Injury

United States Unintentional Injury

<u>Cause</u>	<u>Deaths</u>	<u>Percent</u>
MV Traffic	127,193	44.8%
Fall	33,633	11.8%
Poisoning	28,745	10.1%
Suffocation	12,987	4.6%
Drowning	12,360	4.4%
Fire/Burn	11,304	4.0%
Other Causes	57,690	20.3%
	283,912	100.0%

Massachusetts Only Unintentional Injury

<u>Cause</u>	<u>Deaths</u>	<u>Percent</u>
MV Traffic	1,427	37.7%
Fall	520	13.7%
Suffocation	267	7.1%
Drowning	161	4.3%
Fire/Burn	160	4.2%
Other Causes	1,249	33.0%
	3,784	100.0%

Intentional Injury

United States Suicide

<u>Cause</u>	<u>Deaths</u>	<u>Percent</u>
Firearm	54,235	58.5%
Suffocation	15,960	17.2%
Poisoning	15,355	16.6%
Other Causes	7,172	7.7%
	92,722	100.0%

Massachusetts Only Suicide

<u>Cause</u>	<u>Deaths</u>	<u>Percent</u>
Suffocation	523	35.6%
Firearm	428	29.1%
Poisoning	309	21.0%
Other Causes	211	14.3%
	1,471	100.0%

United States Homicide and Legal Intervention

<u>Cause</u>	<u>Deaths</u>	<u>Percent</u>
Firearm	43,684	68.6%
Cut/Pierce	7,647	12.0%
Suffocation	2,327	3.7%
Other Causes	10,054	15.8%
	63,712	100.0%

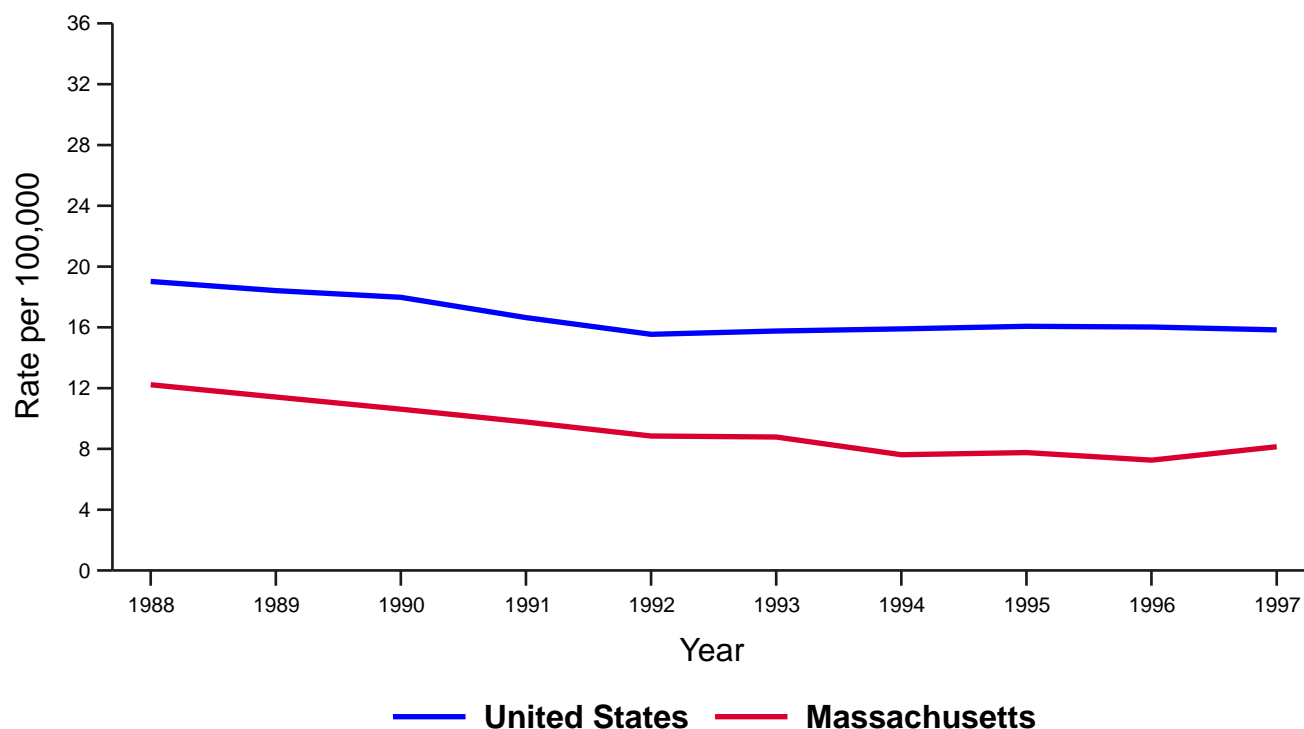
Massachusetts Only Homicide and Legal Intervention

<u>Cause</u>	<u>Deaths</u>	<u>Percent</u>
Firearm	289	51.7%
Cut/Pierce	125	22.4%
Suffocation	28	5.0%
Other Causes	117	20.9%
	559	100.0%

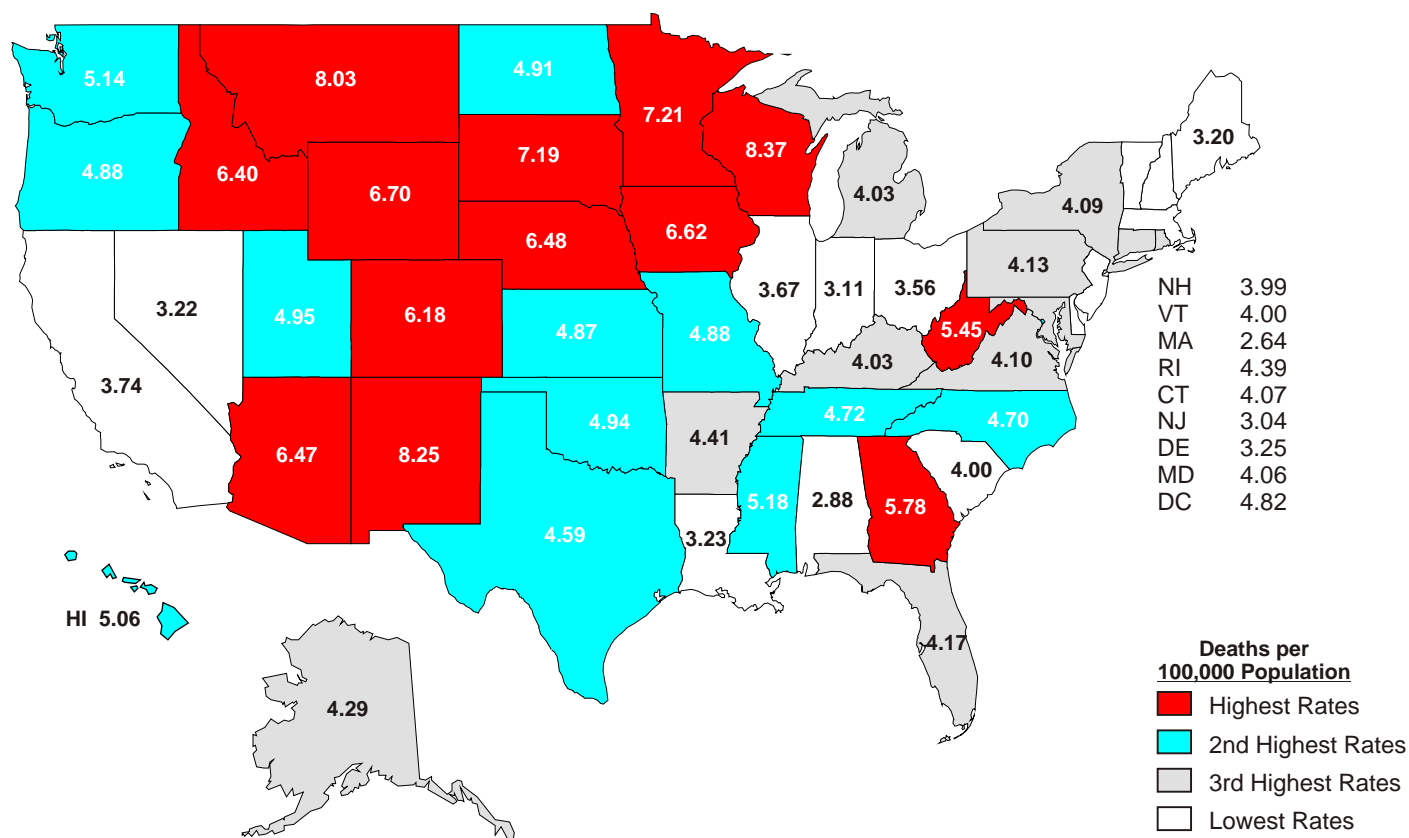
Unintentional Motor Vehicle, Traffic-Related Death Rates United States, 1995-1997



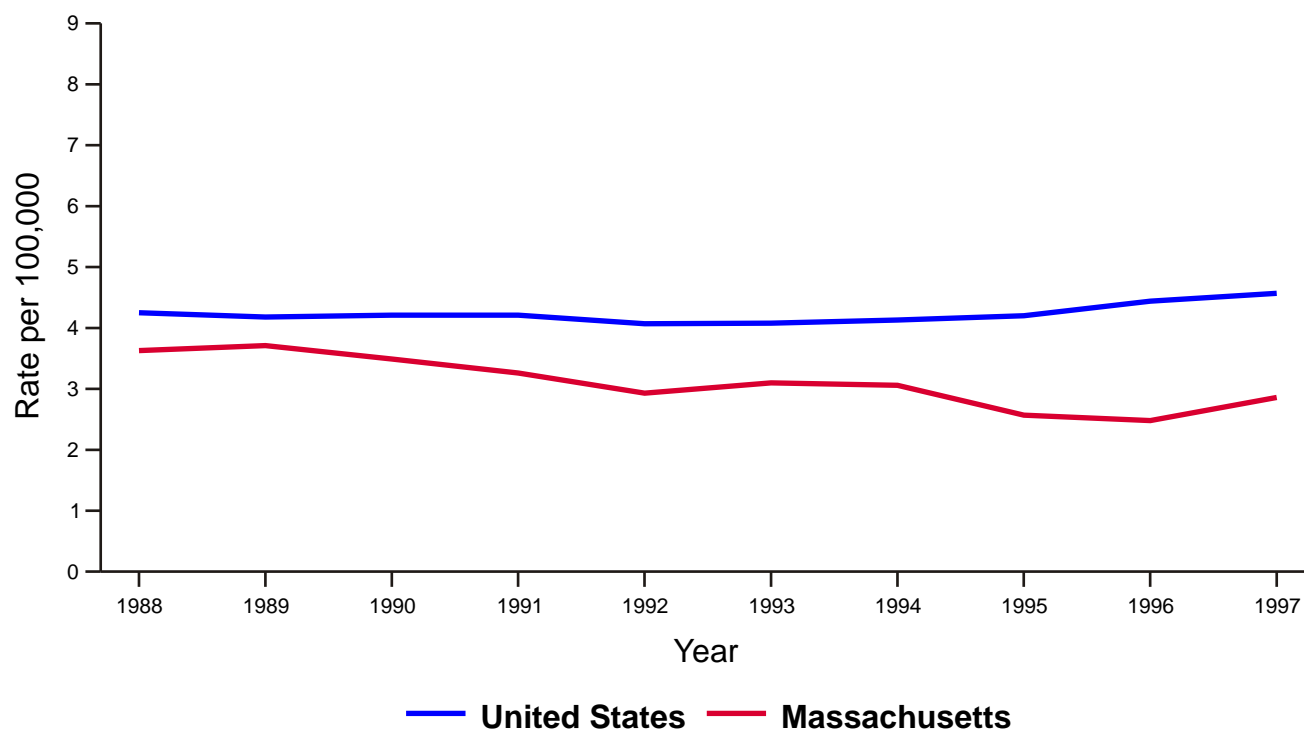
United States and Massachusetts 1988-1997



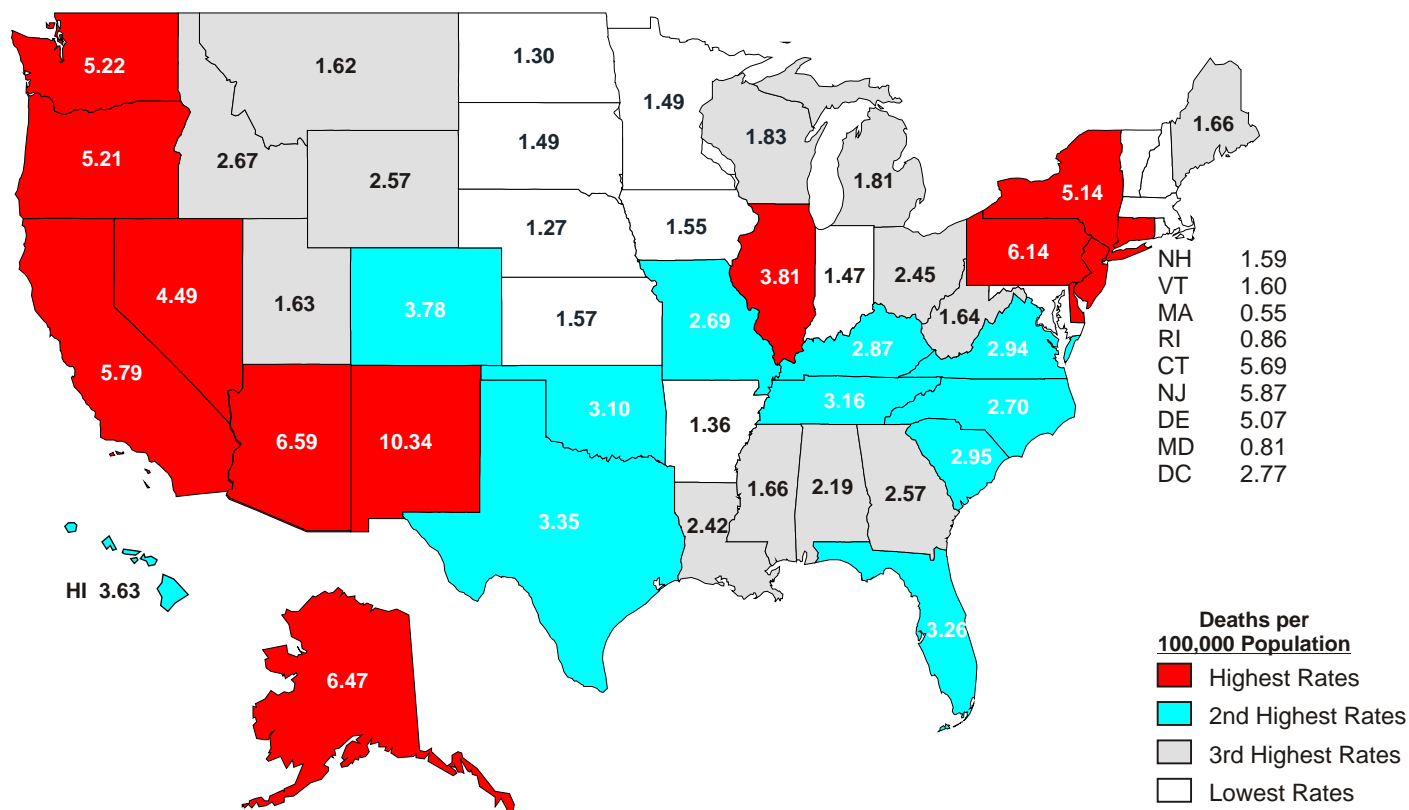
Unintentional Fall Death Rates United States, 1995-1997



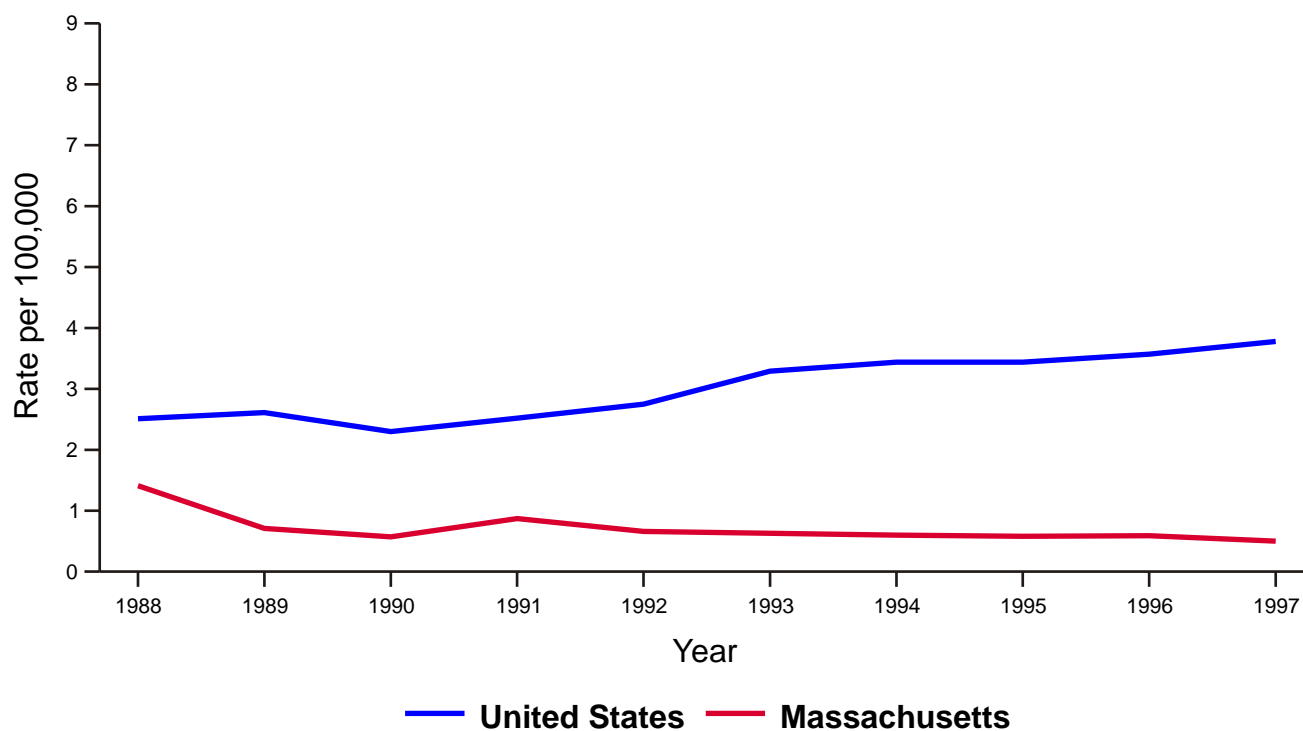
United States and Massachusetts 1988-1997



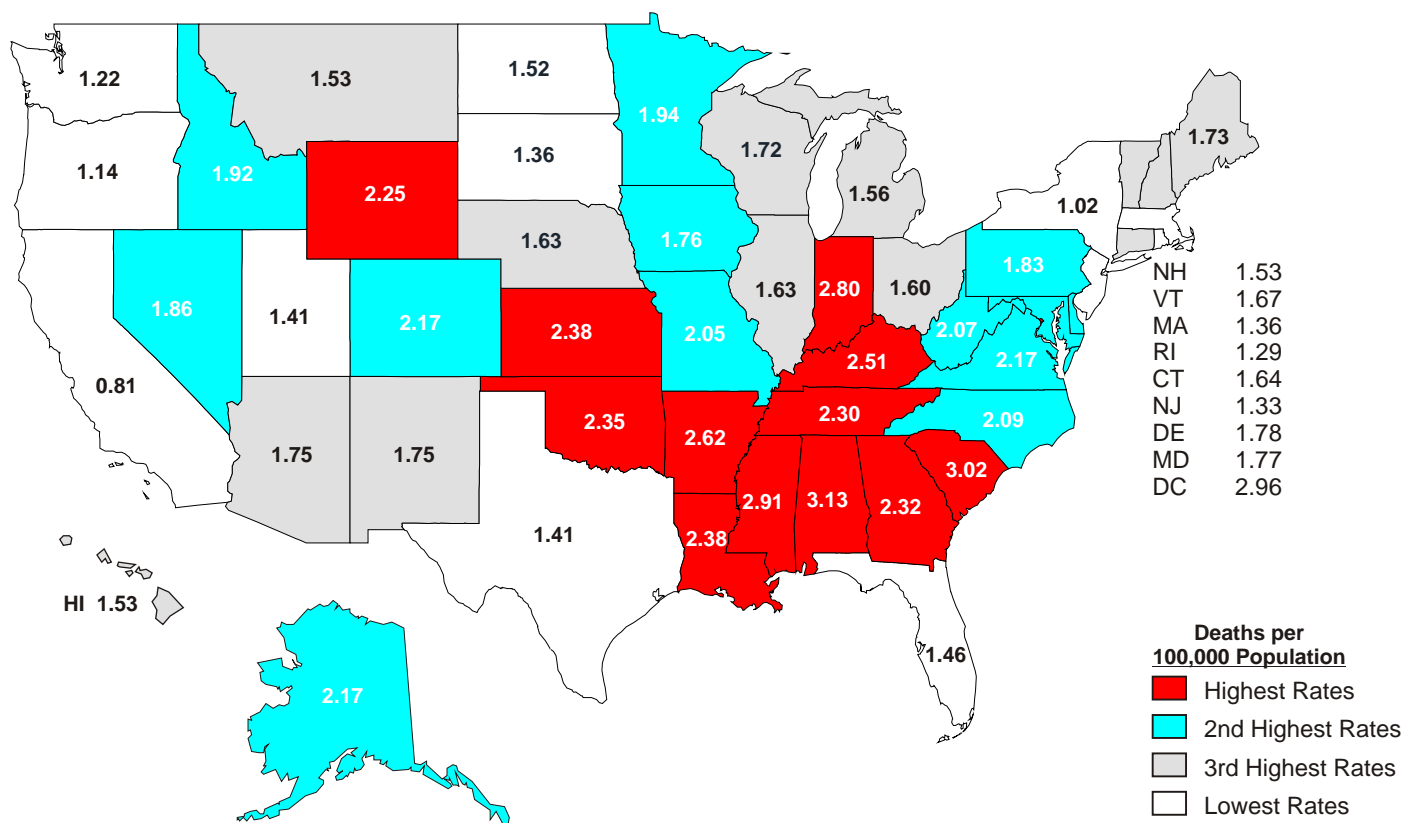
Unintentional Poisoning Death Rates United States, 1995-1997



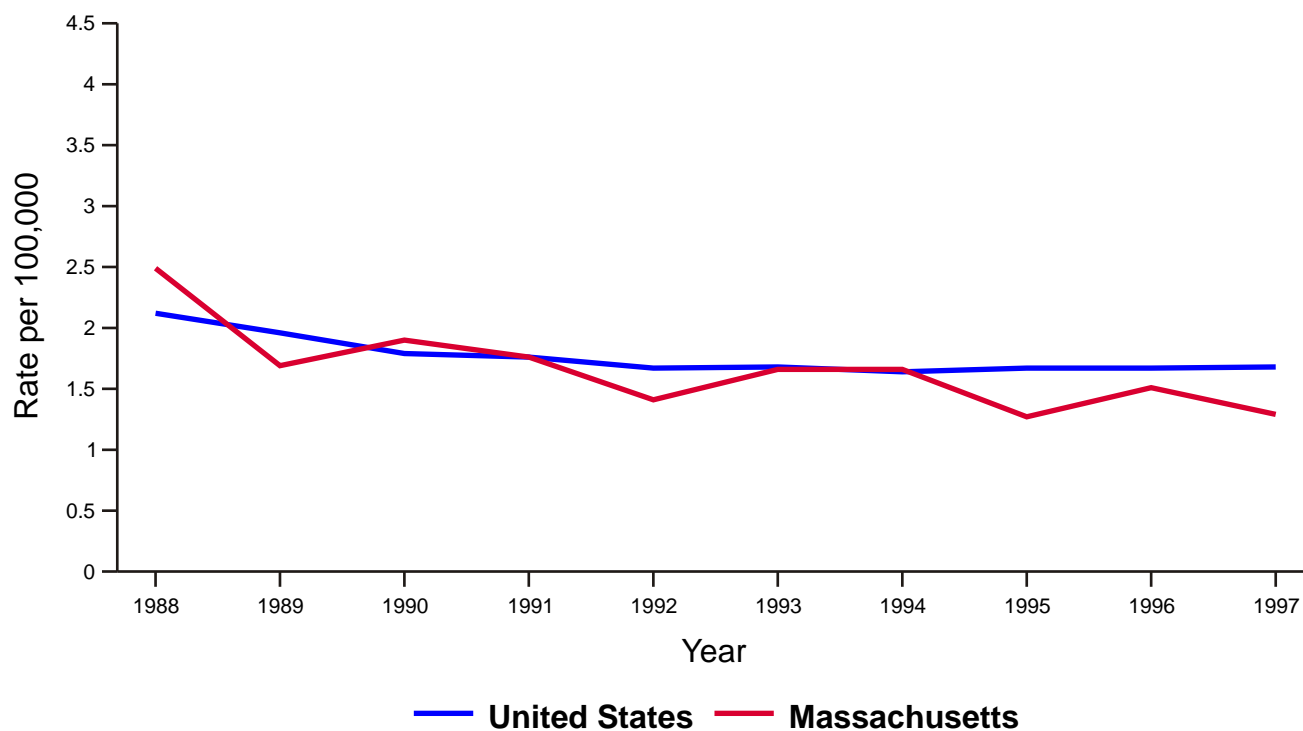
United States and Massachusetts 1988-1997



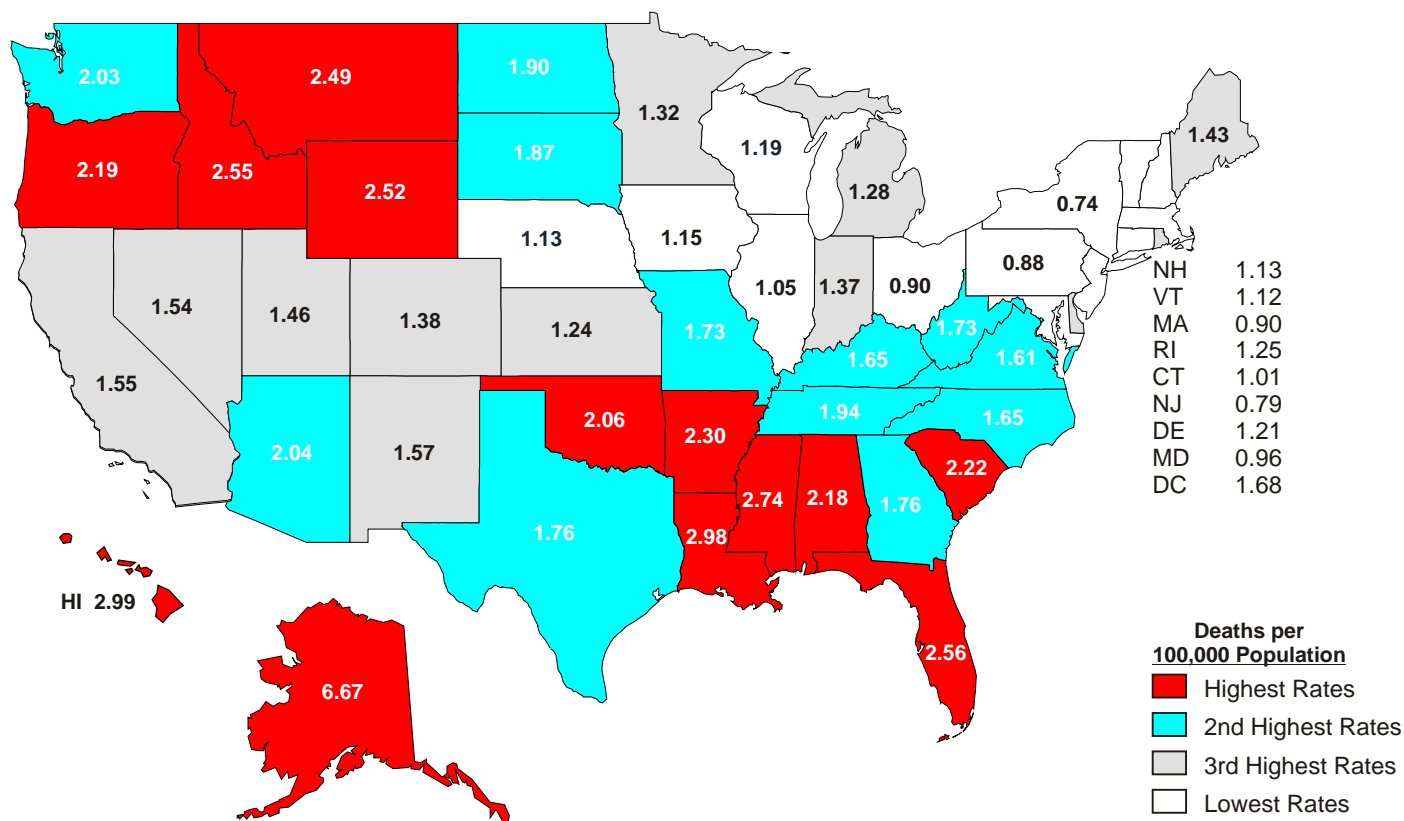
Unintentional Suffocation Death Rates United States, 1995-1997



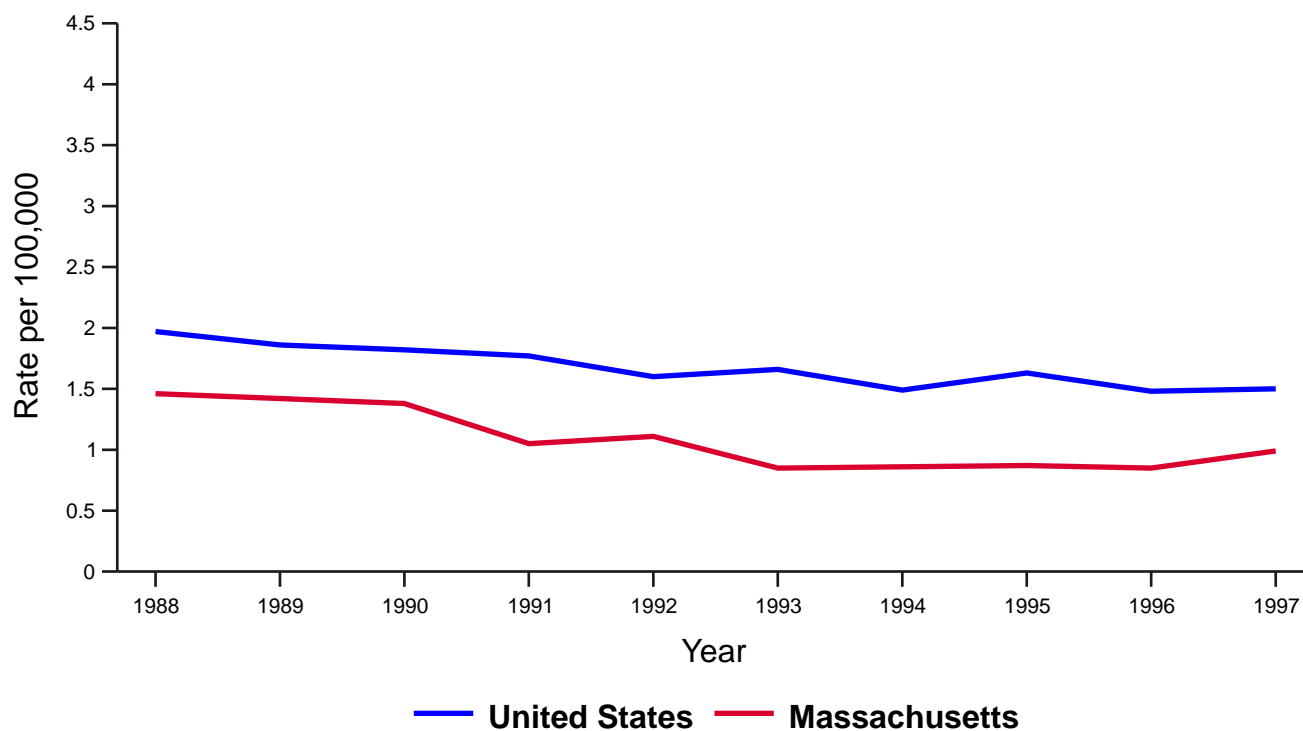
United States and Massachusetts 1988-1997



Unintentional Drowning Death Rates United States, 1995-1997



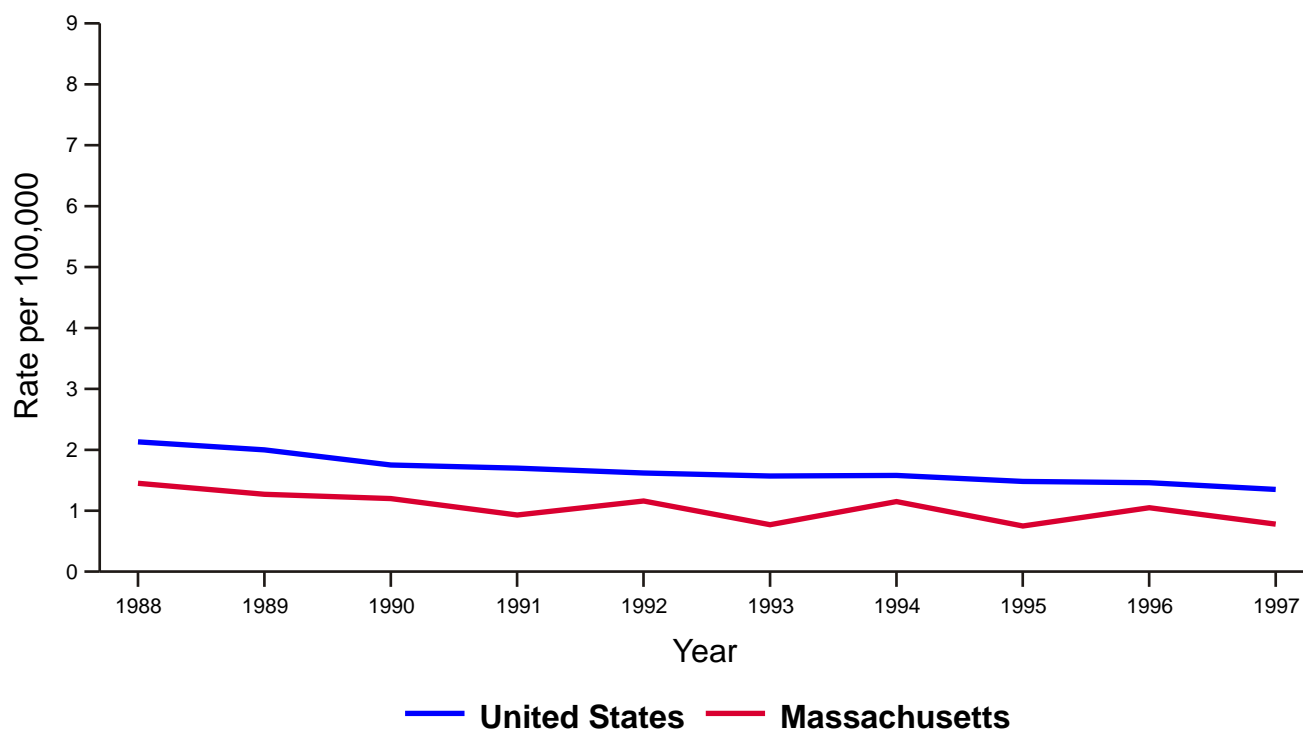
United States and Massachusetts 1988-1997



Unintentional Fire and Burn-Related Death Rates United States, 1995-1997



United States and Massachusetts 1988-1997



Deaths per 100,000 Pop.

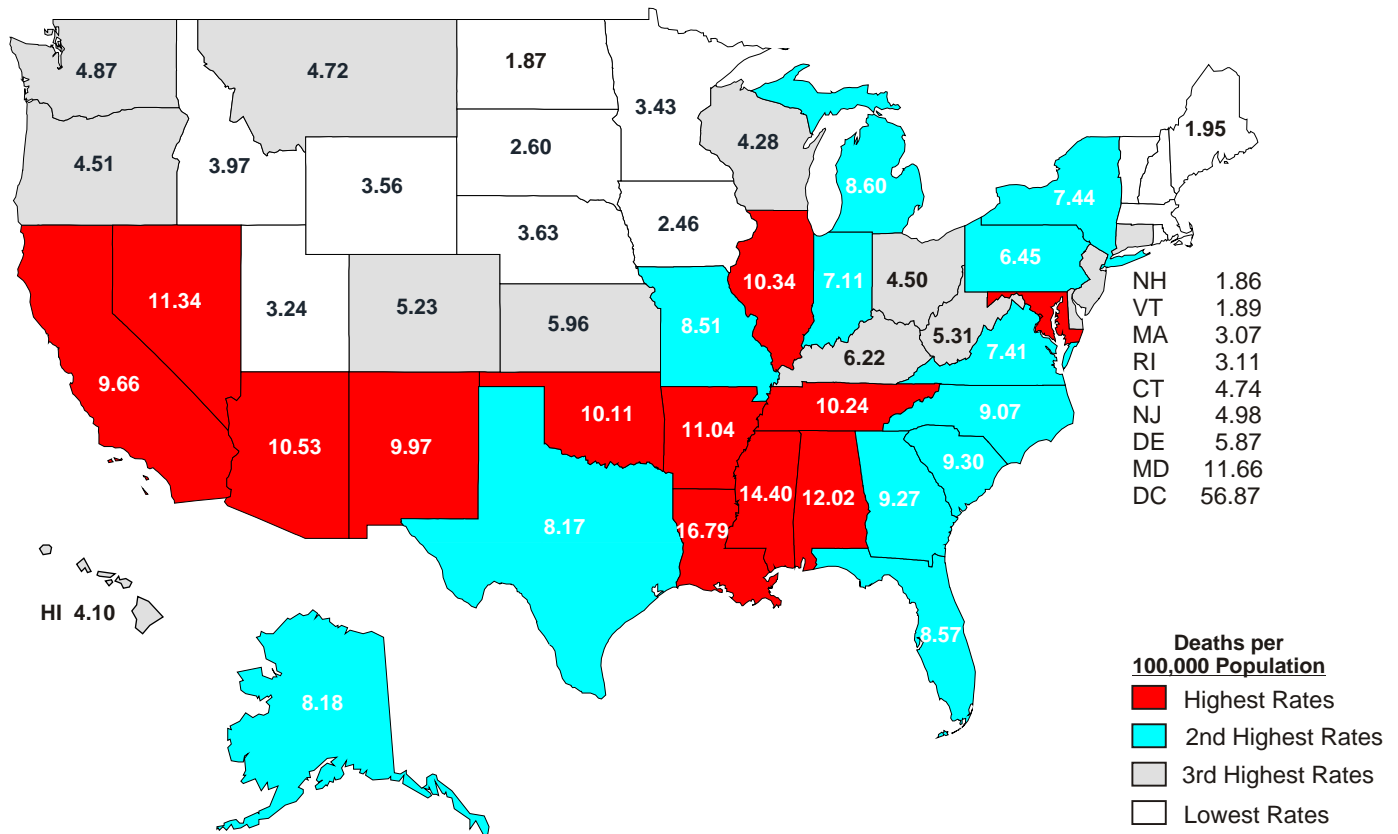
- Highest
- 2nd Highest
- 3rd Highest
- Lowest

State	Deaths per 100,000 Pop.
AK	19.73
AL	14.34
AR	14.96
AZ	17.44
CA	11.57
CO	21.38
CT	8.75
DE	12.00
DC	6.49
FL	14.34
GA	12.05
HI	11.52
IA	11.20
ID	15.48
IL	8.74
IN	13.58
KS	12.18
KY	12.30
LA	12.58
MA	7.84
MD	10.02
ME	12.26
MI	11.60
MN	10.70
MO	11.56
MS	12.13
MT	13.08
NH	11.81
NJ	7.22
NM	23.89
NY	11.65
OH	18.76
OK	18.65
OR	15.98
PA	12.34
RI	8.03
SC	12.22
SD	12.09
TN	13.04
TX	12.00
UT	16.73
VT	12.07
WA	13.75
WI	10.77
WY	7.40

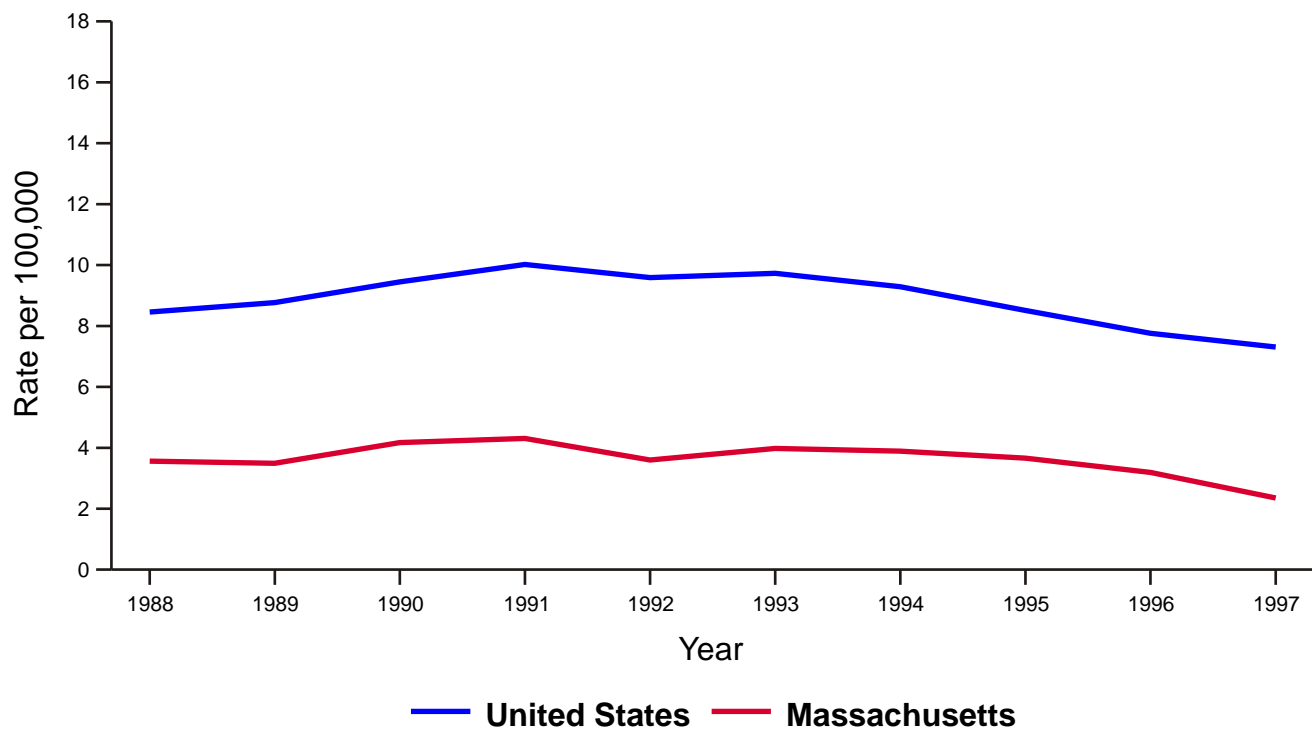
The graph displays two data series: the United States (blue line) and Massachusetts (red line). The y-axis represents the 'Rate per 100,000' from 0 to 18, and the x-axis represents the 'Year' from 1988 to 1997. The United States rate starts at approximately 12.5 in 1988, peaks at 12.5 in 1990, and ends at approximately 11.5 in 1997. The Massachusetts rate starts at approximately 8.3 in 1988, peaks at 8.6 in 1990, and ends at approximately 7.9 in 1997.

Year	United States	Massachusetts
1988	12.5	8.3
1989	12.3	7.9
1990	12.5	8.6
1991	12.3	8.0
1992	12.0	8.6
1993	12.1	7.7
1994	12.0	8.3
1995	11.9	7.8
1996	11.7	7.8
1997	11.5	7.9

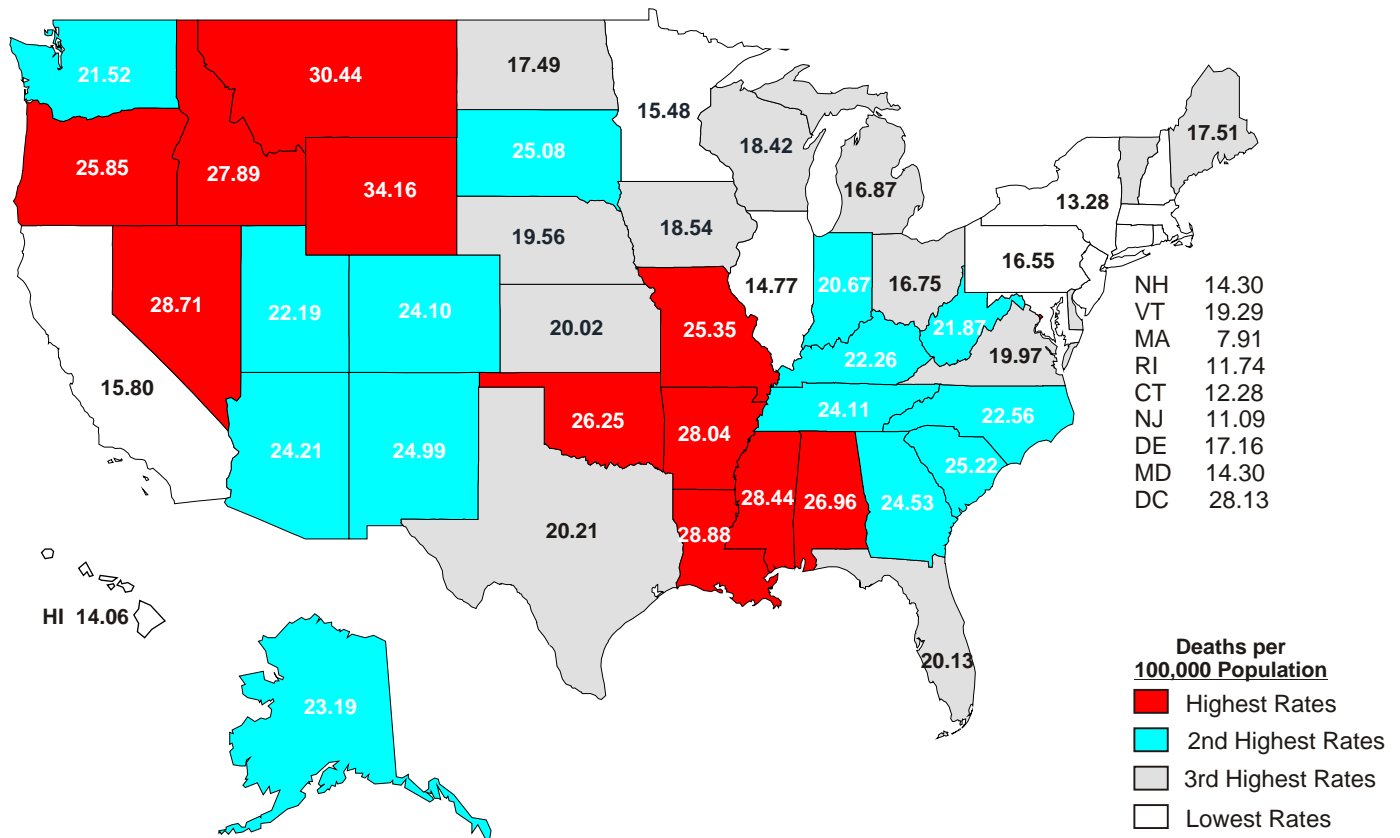
Homicide Death Rates United States, 1995-1997



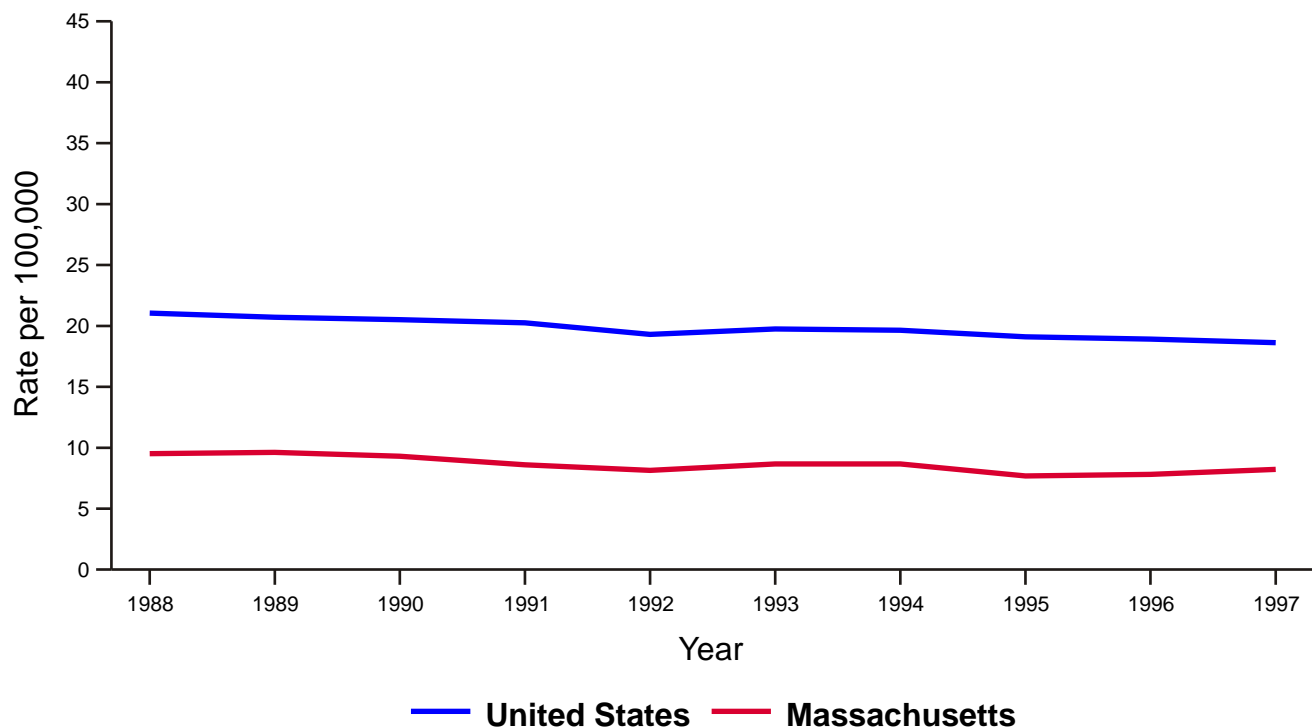
United States and Massachusetts 1988-1997



Traumatic Brain Injury-Related Death Rates* United States, 1995-1997

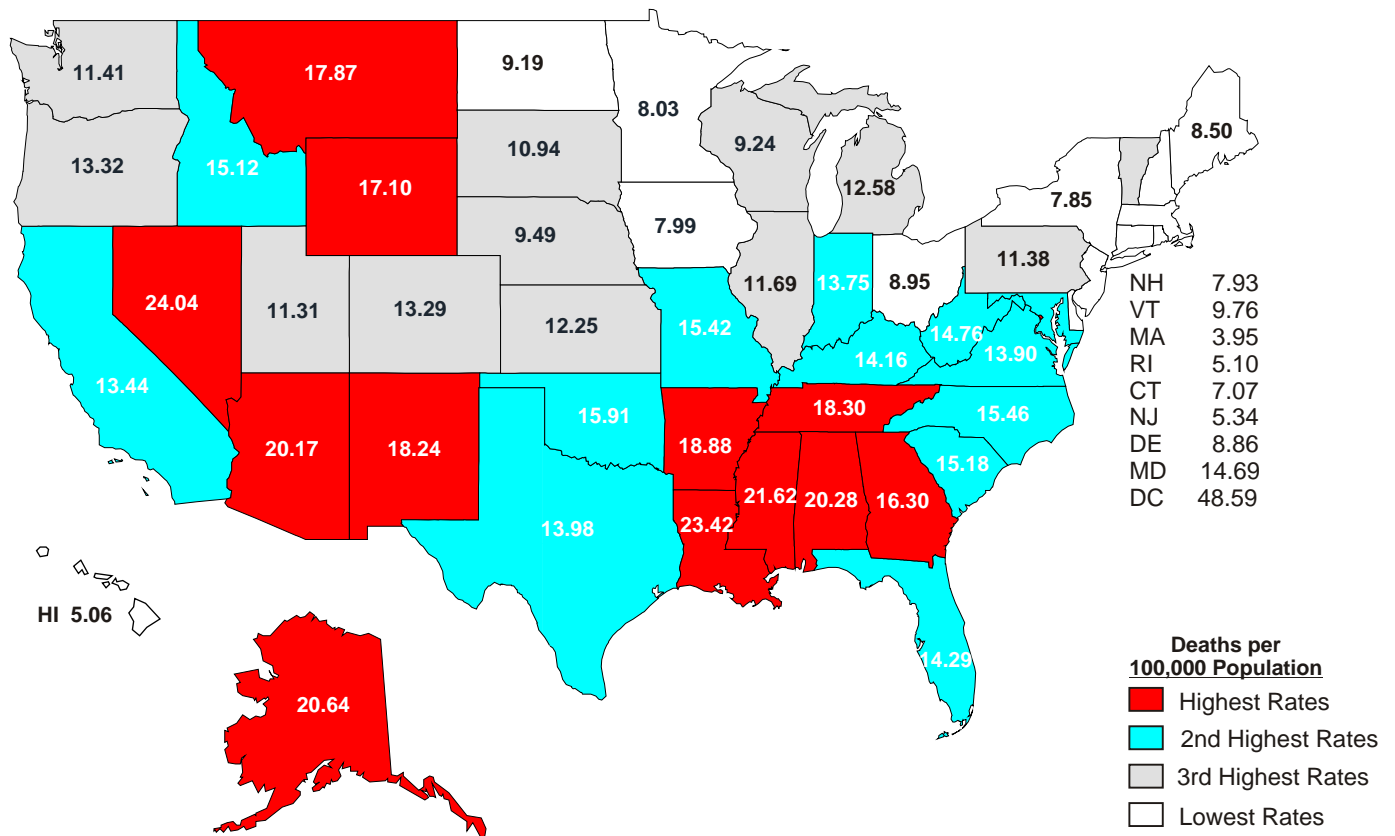


United States and Massachusetts 1988-1997

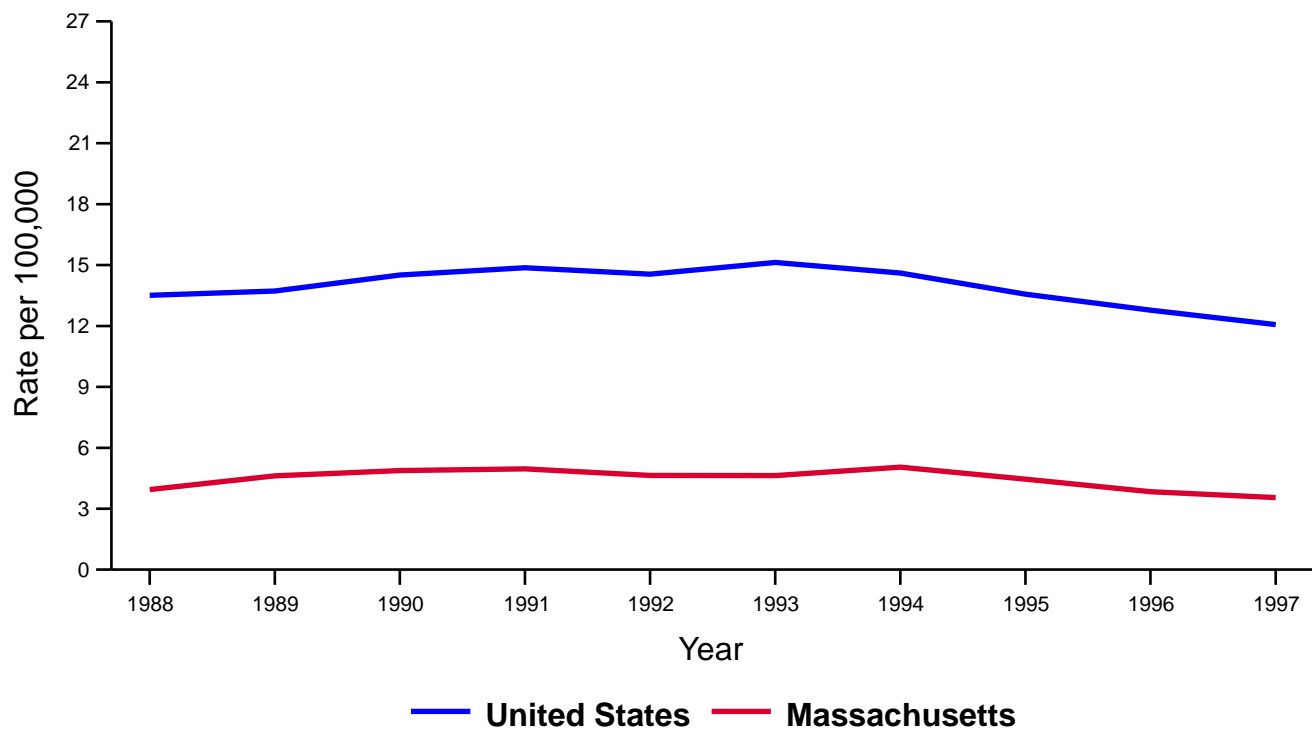


* Includes unintentional and intentional deaths from motor vehicles, firearms, falls, and other causes (of determined and undetermined intent).

Firearm-Related Death Rates* United States, 1995-1997



United States and Massachusetts 1988-1997



* Includes deaths from firearm suicide, firearm homicide, unintentional firearm-related deaths, and firearm-related deaths of undetermined intent.

MASSACHUSETTS INJURY CONTROL PROJECTS

Cooperative Agreements

The National Center for Injury Prevention and Control (NCIPC) currently funds the following work through six cooperative agreements in Massachusetts:

- Evaluation of Violence Prevention Programs for High-Risk Youth: a program to evaluate violence prevention programs for high-risk youth 13–17 years of age, treated in emergency departments for intentional assault injury. The project, Boston Cares, seeks to: (1) reduce re-injury among youth treated for intentionally inflicted non-domestic injuries by linking them with locally accessible community-based service agencies that provide them with services or further referral; (2) foster collaboration between the hospital/medical community and community-based agencies providing services to youth at risk of violence; (3) conduct a formative evaluation of procedures and protocols; (4) conduct a process evaluation that explores the extent to which the key barriers to successful implementation were identified and addresses; and (5) conduct an outcome evaluation that compares treatment and control subjects on measures of intermediate and ultimate outcomes.
(*Education Development Center, Inc., Newton*)
- Violence Against Women: a project to develop a statewide surveillance system utilizing new and existing data sources to track incidence and prevalence of intimate partner violence to women age 12 and over; design, implement, and evaluate a hospital emergency department-based surveillance system to track incidence and prevalence of intimate partner violence; and create replication guidelines that can serve as the blueprint for other states that wish to establish statewide surveillance for intimate partner violence.
(*Massachusetts Department of Public Health*)
- Community-Based Intervention Research for Children in Motor Vehicles: a project to design, implement, and evaluate a controlled community-based intervention trial to increase the proportion of children under the age of 12 who ride in the rear seat of motor vehicles. Although it has been known for decades that the rear seat is safer than the front seat for all occupants, the widespread introduction of passenger airbags brings urgency to the need to move children to the rear seat. The theoretical basis of the intervention is rooted in the decision sciences, with techniques of risk communication and incentives employed to change the decision making of parents. (*Harvard Center for Risk Analysis*)
- State Injury Intervention and Surveillance Program (Emergency): a program to develop a statewide surveillance system to track the incidence and causes of injuries treated in hospital emergency departments. Data from the system will assist in identifying preventable injuries and high-risk groups and planning injury prevention programs. The Emergency Department Surveillance and Coordinated Injury Prevention Project will: (1) implement an electronic, E-coded injury surveillance system in a representative sample of hospitals; (2) monitor and supplement the system through ongoing chart audits and abstraction of DEEDS and other injury variables on a sample of cases; (3) evaluate the system using CDC guidelines for

the evaluation of surveillance systems; (4) participate in a process of continuous quality improvement with surveillance stakeholders; and, (5) analyze and disseminate the surveillance findings to injury prevention practitioners and the public health community. (*Massachusetts Department of Public Health*)

- Coordinated Community Responses to Prevent Intimate Partner Violence: a project to facilitate a coordinated community response to intimate partner violence among Dorchester's families which utilizes the diverse racial, ethnic and religious resources that have traditionally sustained them. The project will enhance operations in the community; expand and institutionalize abuse prevention capacity within member institutions; and shape a coordinated primary prevention and victim services program that is more family and community-centered. (*Federated Dorchester, Dorchester*)
- State Injury Intervention and Surveillance Program (Fire): a program to increase the prevalence of functional smoke alarms and reduce morbidity and mortality from residential fires in three Massachusetts communities. Target population is low income, urban families with young children (ages 0–5), and/or older adults (ages 65 and older). Asians, Blacks, and Hispanics comprise approximately 20 percent of the target population in each of the three target communities. (*Massachusetts Department of Public Health*)

Research Grants

The NCIPC supports the following extramural research project in Massachusetts and one major research center:

- Reach for Health Study of Adolescent Suicidal Behaviors: a study that builds upon the ongoing, community-based, longitudinal Reach for Health (RFH) project which is a prevention study targeting risk behaviors related to violence, alcohol and substance use, and early and unprotected sex among economically disadvantaged minority youth using a socialcognitive model. The investigators propose to add a mental health/suicidal behavior module to the next two rounds of data collection in order to (1) investigate the emergent health risk of suicide in a relatively understudied population; (2) examine this risk in the context of other, potentially related risk behaviors, including externally-directed violence and weapon carrying; and (3) examine the effectiveness of the RFH school-based interventions. The study is designed to address violence, sex, and drug risks among minority adolescents, including reducing risks related to suicide. (*Lydia O'Donnell, Ph.D., Education Development Center, Inc., Newton*)
- Injury Control Research Center: The Harvard Injury Control Center is a multidisciplinary unit based at the Harvard School of Public Health. The theme of the Center is "injury control through public policy," which is accomplished through applied research projects, training activities, and communications with professionals and the public. The Center focuses on three priority programs: trauma care systems, violence prevention, and traffic injury prevention. (*David Hemenway, Ph.D., Harvard University*)